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UNTIL RELEASED BY
HOUSE ARMED SERVICES COMMITTEE

STATEMENT OF
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BEFORE THE
HOUSE ARMED SERVICES COMMITTEE
SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS
HEARING ON
THE DEPARTMENT OF DEFENSE'S
30-YEAR AVIATION AND SHIPBUILDING PLANS
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Chairman Wittman, Ranking Member Cooper, distinguished members of the subcommittee, thank you for the opportunity to appear before you today to discuss the Department of Defense's (DOD's) 30-year shipbuilding plan. As requested, my testimony will focus on the following issues:

- the value of the 30-year shipbuilding plan in supporting congressional oversight of Navy shipbuilding activities;
- the sufficiency of the 30-year shipbuilding plan for achieving and maintaining Navy ship force-structure goals;
- the affordability of the 30-year shipbuilding plan; and
- potential options for altering the content of the report on the 30-year shipbuilding plan.

The testimony also includes an appendix providing a brief history of the requirement to submit a 30-year shipbuilding plan.

Value of 30-Year Shipbuilding Plan in Supporting Congressional Oversight

The main purpose of the 30-year shipbuilding plan is to support effective congressional oversight of DOD plans for Navy shipbuilding by giving Congress information that is important to performing this oversight function but not available in the five-year data of the Future Years Defense Plan (FYDP). The 30-year plan supports effective congressional oversight of DOD plans for Navy shipbuilding in at least five ways:

- **The 30-year shipbuilding plan enables Congress to assess whether the Navy intends to procure enough ships to achieve and maintain its stated ship force-level goals.** Determining whether procurement plans fully support stated force-level goals is a key oversight function for Congress. The 30-year plan makes visible to Congress projected ship force-level shortfalls (relative to stated goals) that are either not visible or not fully visible in the five-year data of the FYDP. Such shortfalls are likely to be fully or substantially visible over a 30-year period. Given the long construction times of ships, industrial-base limits on how quickly annual ship procurement rates can be increased (i.e., "ramped up"), and financial and industrial-base limits on maximum annual ship procurement rates, mitigating projected shortfalls that occur largely or entirely beyond the FYDP can sometimes require making adjustments to planned ship procurement rates that begin in the near term, within the FYDP. By providing Congress advance warning of projected ship force-level shortfalls, the 30-year shipbuilding plan gives Congress an opportunity to consider whether to address these shortfalls before it might become too late to do much about them. In serving this function, the value of the 30-year shipbuilding plan might be likened to the value of headlights for a driver of a large truck traveling on a country road at night: The driver cannot quickly effect substantial changes in the truck's speed and direction, and therefore obtains a critical benefit from having the advance warning that the headlights provide of approaching curves or obstructions in the road.
- **The 30-year shipbuilding plan helps Congress determine whether there is a fundamental imbalance between Navy program goals and projected Navy**

resources. Making such a determination is another key oversight function. A 30-year shipbuilding plan that shows sizeable and long-lasting shortfalls in projected ship force levels can suggest a fundamental imbalance between Navy program goals and projected Navy resources, which in turn can suggest a need for a change in defense strategy, the level of DOD resources, the allocation of DOD resources, and/or the mix of ships to be procured.

- **The 30-year shipbuilding plan helps Congress to assess whether DOD ship procurement plans are likely to be affordable within future defense budgets.** A 30-year shipbuilding plan that appears unaffordable may again suggest a need for a change in defense strategy, the level of DOD resources, the allocation of DOD resources, and/or the mix of ships to be procured.
- **Supporting information provided in conjunction with the 30-year shipbuilding plan enables Congress to assess whether Navy ship procurement planning is reasonable in terms of assumed service lives for existing ships and estimated procurement costs for new ships.** The assumptions that the Navy makes regarding ship service lives and procurement costs can change over time, and can make a significant difference in projected ship force levels. Assessing whether the Navy's current assumptions are reasonable thus becomes a key part of the oversight function.
- **The 30-year shipbuilding plan enables Congress to assess the potential industrial-base implications of DOD's intentions for ship procurement.** Potential oversight issues for Congress in this regard include the ability of the shipbuilding industrial base to execute the planned work, potential inefficiencies that may result from rising and falling workloads over the 30-year period, and the potential effects of DOD's shipbuilding intentions on the financial health and survival of the shipbuilding industrial base.

Experience with the 30-year shipbuilding plan suggests that it has supported congressional oversight of DOD shipbuilding in the ways outlined above. Examples of specific oversight issues that have been identified as a result of the 30-year shipbuilding plans include the following:

- changes in the Navy's ship force-level goals, and the potential implications of these changes;
- the potential affordability of the 30-year shipbuilding plan;
- the projected shortfall in cruisers and destroyers;
- the projected shortfall in attack submarines;
- the projected shortfall in amphibious ships;
- the potential pressure that the Ohio replacement (i.e., SSBN[X]) ballistic missile submarine program may place on the Navy's ability to procure other kinds of ships during the period FY2019-FY2033;
- Navy assumptions about the potential procurement costs of certain future ships, such as the SSBN(X) submarine, the Flight III DDG-51 destroyer, and the LSD(X) amphibious ship;
- changing Navy assumptions about the service lives of certain amphibious ships and surface combatants, and whether the Navy has programmed the maintenance funding to support the service lives shown in the 30-year plan for some of these ships; and

- rising and falling shipyard workload levels that may occur over the 30-year period, particularly for building certain categories of ships, and the possible effects this could have on the shipbuilding industrial base.

These issues are central to understanding the future of the Navy, and thus can be critical to conducting effective congressional oversight of Navy programs and budgets.

Information from the 30-year shipbuilding plan is incorporated into multiple CRS reports on Navy shipbuilding programs, where it is used to identify oversight issues and options for Congress.¹ In addition, at the request of Congress, the Congressional Budget Office (CBO) performs an independent assessment of the affordability of each 30-year shipbuilding plan. This assessment has become a touchstone document in congressional discussions of the prospective affordability of Navy shipbuilding.

Information from the 30-year shipbuilding plan was featured in CRS testimony for the Seapower and Projection Forces subcommittee's March 9 hearing on Navy shipbuilding programs,² and was the basis for CBO's testimony at the hearing.³ In my opening remarks for the hearing, I stated:

My testimony outlines a number of potential shipbuilding execution challenges....

But right now the one point I'd like to focus on [in my opening remarks] are the shortfalls in attack submarines and in cruisers and destroyers that are projected to occur in the 2020s and beyond even if the Navy's 30-year shipbuilding plan is fully implemented.

These projected shortfalls are significant. If they occur, they could make it difficult or impossible for the Navy to fully perform its projected missions....

These projected shortfalls have been on the books since last year but they haven't received much attention in public discussions of the Navy shipbuilding plan. This might be because they look like they are far in the future. But in terms of issues they might pose for policymakers, that's not necessarily the case.

Substantially redressing these shortfalls could involve putting additional destroyers and attack boats [into] the shipbuilding plan or extending the service lives of existing cruisers, destroyers and attack boats....

¹ Information from the 30-year shipbuilding plan is featured significantly in the CRS reports on Navy force structure and shipbuilding plans (CRS Report RL32665, *Navy Force Structure and Shipbuilding Plans: Background and Issues for Congress*, by Ronald O'Rourke), the DDG-51 and DDG-1000 destroyer programs (CRS Report RL32109, *Navy DDG-51 and DDG-1000 Destroyer Programs: Background and Issues for Congress*, by Ronald O'Rourke), the Virginia-class attack submarine (CRS Report RL32418, *Navy Virginia (SSN-774) Class Attack Submarine Procurement: Background and Issues for Congress*, by Ronald O'Rourke), and the Ohio-replacement (SSBN[X]) ballistic missile submarine program (CRS Report R41129, *Navy SSBN(X) Ballistic Missile Submarine Program: Background and Issues for Congress*, by Ronald O'Rourke).

Information from the 30-year shipbuilding plan is also included in the CRS reports on the CVN-78 class aircraft carrier program (CRS Report RS20643, *Navy Ford (CVN-78) Class Aircraft Carrier Program: Background and Issues for Congress*, by Ronald O'Rourke), the Littoral Combat Ship (LCS) program (CRS Report RL33741, *Navy Littoral Combat Ship (LCS) Program: Background, Issues, and Options for Congress*, by Ronald O'Rourke), the LPD-17 class amphibious ship program (CRS Report RL34476, *Navy LPD-17 Amphibious Ship Procurement: Background, Issues, and Options for Congress*, by Ronald O'Rourke), and the Aegis ballistic missile defense (BMD) program (CRS Report RL33745, *Navy Aegis Ballistic Missile Defense (BMD) Program: Background and Issues for Congress*, by Ronald O'Rourke).

² Statement of Ronald O'Rourke, Specialist in Naval Affairs, Congressional Research Service, before the House Armed Services Committee Subcommittee on Seapower and Projection Forces hearing on Navy Shipbuilding Acquisition Programs and Budget Requirements of the Navy's Shipbuilding and Construction Plan, March 9, 2011, 32 pp.

³ Statement of Eric J. Labs, Senior Analyst for Naval Forces and Weapons, An Analysis of the Navy's Shipbuilding Plans, before the Subcommittee on Seapower and Projection Forces, Committee on Armed Services, U.S. House of Representatives, March 9, 2011, 21 pp.

And because of the pressures that the Ohio replacement program could place on the shipbuilding budget, one option would be to add at least some, if not most or all, of these additional destroyers and attack boats to the shipbuilding plan in the years prior to the Ohio-replacement boats.

If so, then the question of whether to add these ships to the plan could become a near-term issue for policy makers. The alternative of extending the lives of existing cruisers, destroyers and attack boats by 10 or 15 years beyond their currently planned lives poses a serious question of feasibility and cost effectiveness, especially for the attack boats. If this option were feasible, implementing it could require increasing, perhaps starting right away, funding levels for the maintenance of these ships to help ensure they'll remain in good enough shape to eventually have their lives extended for another 10 or 15 years.

This additional maintenance funding would be on top of the funding that the Navy has already programmed to help get these ships out to the end of their currently planned lives, and because that this additional funding might need to start soon it could again pose a near-term issue for policy makers. Implementing either these options within the Navy's currently planned top line would likely compel the Navy to reduce other critical programs below desired levels. So the question of what to do about these two projected shortfalls is not only a potentially near-term issue for policy makers, but one that could also raise fundamental for policy makers about the value of naval forces in defending the nation's interests and the priority that naval forces should receive in allocation of overall DOD funds.⁴

Since planned ship procurement quantities over the FYDP typically change each year with the submission of the budget, near-term procurement quantities in a 30-year shipbuilding plan that is one or more years old will likely not match those in the current FYDP, and the force-level projections shown in that 30-year plan consequently will no longer be accurate. A mismatch between a 30-year shipbuilding plan that is one or more years old and the current FYDP can complicate the task of understanding the implications of Navy shipbuilding plans, which in turn can make it more difficult to conduct effective congressional oversight of Navy shipbuilding. A 30-year shipbuilding plan that is one or more years old might also contain outdated and inaccurate information concerning the types of ships to be procured, estimated ship procurement costs, and assumed ship service lives. Observers seeking to discourage effective congressional oversight of DOD shipbuilding plans might seek to discount the importance of oversight issues identified in a 30-year shipbuilding plan that is one or more years old on the grounds that the plan is no longer an accurate representation of DOD intentions.

In the absence of a 30-year shipbuilding plan, CRS or CBO can generate projections of potential future force levels for certain categories of ships. I did so, for example, for the cruiser-destroyer force for CRS reports issued in 1985 and 1994, and for the attack submarine force for testimony and reports issued between 1995 and 1999. CRS and CBO force-level projections, however, might not carry as much weight as DOD force-level projections that appear in 30-year shipbuilding plans, in part because generating such projections can require CRS or CBO to make assumptions about ship service lives and outyear procurement rates that might not match current DOD thinking on these issues.

DOD cannot predict the exact designs of ships that will be procured 20 or 30 years from now. The 30-year shipbuilding plan, however, is not intended to compel DOD to make such predictions, but rather to serve the five oversight-support functions outlined above. The 30-year shipbuilding plan can serve these functions without DOD making predictions about the exact designs of ships to be procured 20 or 30 years from now.

⁴ Source: Transcript of hearing.

The requirement to prepare a report on the 30-year shipbuilding plan, like congressional requirements for DOD to prepare other reports for Congress, imposes an administrative burden on DOD. A key question is whether the report's value to Congress in supporting effective congressional oversight of Navy shipbuilding is worth the administrative burden involved in creating it.

Annual reports on 30-year shipbuilding plans have shown year-to-year instability in DOD shipbuilding planning. Another question, consequently, is whether preparing the reports causes this instability, or simply results in it being revealed to Congress. If preparing the reports causes this instability, then a potential oversight issue for Congress is why Navy shipbuilding plans are so volatile that preparing reports about them can cause this instability. If preparing annual reports does not cause this instability, but simply results in it being revealed to Congress, then in the absence of a report on a 30-year plan, the instability might still exist, but Congress would not necessarily learn of it in a timely manner, which could hamper Congress' ability to understand and conduct effective oversight of DOD shipbuilding.

Year-to-year instability in the 30-year shipbuilding plan can add to DOD's burden in preparing the report. Such instability, however, might also make it more important that the reports be submitted to Congress more frequently rather than less frequently, so that Congress can be kept aware of these changes in a timely manner and not base its oversight work on outdated and inaccurate information.

Although a principal purpose of the 30-year shipbuilding plan is to support effective congressional oversight of DOD plans for Navy shipbuilding, the 30-year shipbuilding plan may also have value for industry for business-planning purposes, and perhaps even for DOD as a tool for identifying or giving visibility to ship force-level and procurement-planning issues. If the 30-year shipbuilding plan is of value to industry or DOD, however, this is merely incidental to its value for Congress. The main purpose of the 30-year shipbuilding plan is to support effective congressional oversight, and this purpose remains even if the plan has no value for industry or DOD.

Sufficiency of 30-Year Plan for Achieving and Maintaining Ship Force-Structure Goals

As stated in the CRS report on overall Navy force structure and shipbuilding plans, the recently delivered FY2012 30-year (FY2012-FY2041) shipbuilding plan

does not include enough ships to fully support all elements of the [Navy's] 328-ship [force-level] goal⁵ over the long run:

- The Navy projects that if the 30-year shipbuilding plan were fully implemented, the fleet would not reach an end-of-year total of 328 ships at any point during the 30-year period. The Navy projects that the fleet would grow from 290 ships in FY2012 to a peak of 325 ships in FY2022-FY2023, decline to 296 ships in FY2032-FY2034, and then increase back to 305 ships by FY2041.
- The Navy projects that the attack submarine and cruiser-destroyer forces will drop substantially below required levels in the latter years of the 30-year plan. The projected number of cruisers and destroyers drops below the required level of 94

⁵ As discussed in the CRS report on overall Navy force structure and shipbuilding plans, the Navy in February 2006 presented to Congress a goal of achieving and maintaining a fleet of 313 ships, consisting of certain types and quantities of ships. Since then, the Navy has changed its desired quantities for some of those ship types, and the Navy's goals now add up to a desired fleet of 328 ships. Navy officials sometimes refer to the figure of 313 ships as a "floor."

ships in 2025, reaches a minimum of 68 ships in FY2034, and remains below 94 ships through FY2041. The projected number of attack submarines drops below the required level of 48 boats in FY2024, reaches a minimum of 39 boats in FY2030, and remains below 48 boats through 2041.

- There would also be shortfalls in certain years in small surface combatants (i.e., frigates and LCSs [Littoral Combat Ships]), amphibious ships, and support ships.

The projected shortfalls in cruisers and destroyers, attack submarines, and other ships could make it difficult or impossible for the Navy to fully perform its projected missions, particularly during the latter years of the 30-year plan. In light of the projected shortfalls in cruisers-destroyers and attack submarines, policymakers may wish to consider two options:

- increasing planned procurement rates of destroyers and attack submarines, perhaps particularly in years prior to the start of SSBN(X) procurement, and
- extending the service lives of older cruisers and destroyers to 45 years, and refueling older attack submarines and extending their service lives to 40 or more years.

Regarding the second option above, possible candidates for service life extensions include the Navy's 22 Aegis cruisers, the first 28 DDG-51 destroyers (i.e., the Flight I/II DDG-51s), the final 23 Los Angeles (SSN-688) attack submarines (i.e., the Improved 688s), and the 3 Seawolf (SSN-21) class attack submarines—a total of 76 ships. Whether such service life extensions would be technically feasible or cost-effective is not clear. Feasibility would be a particular issue for the attack submarines, given limits on submarine pressure hull life.

Extending the service lives of any of these ships could require increasing funding for their maintenance, possibly beginning in the near term, above currently planned levels, so that the ships would be in good enough condition years from now to remain eligible for service life extension work. Such funding increases would be in addition to those the Navy has recently programmed for ensuring that its surface ships can remain in service to the end of their currently planned service lives.⁶

Affordability of 30-Year Shipbuilding Plan

As stated in the same CRS report cited above,

The Navy estimates that executing the FY2012 30-year (FY2012-FY2041) shipbuilding plan would require an average of \$15.7 billion per year in constant FY2011 dollars. The Congressional Budget Office (CBO) is now examining the FY2012 30-year shipbuilding plan and is expected to soon issue its own estimate of the cost of the plan.

A May 2010 CBO report estimated that the Navy's FY2011 30-year (FY2011-FY2040) shipbuilding plan would require an average of \$19.0 billion per year in constant FY2010 dollars, or about 19% more than the Navy estimated for that plan. The CBO report stated: "If the Navy receives the same amount of funding for ship construction in the next 30 years as it has over the past three decades—an average of about \$15 billion a year in 2010 dollars—it will not be able to afford all of the purchases in the 2011 plan."...

... the Navy was able to assemble a five-year (FY2012-FY2016) shipbuilding plan with a total of 55 ships, or an average of 11 per year, within available resources in part because almost half of those ships are relatively inexpensive LCSs and JHSVs [Joint High Speed Vessels]. Starting a few years from now, when the LCS and JHSV programs are no longer overrepresented in the shipbuilding plan, and particularly when procurement of

⁶ CRS Report RL32665, *Navy Force Structure and Shipbuilding Plans: Background and Issues for Congress*, by Ronald O'Rourke.

next-generation SSBN(X) ballistic missile submarines begins, procuring an average of 10 or more ships per year will become a considerably more expensive proposition.

The Navy wants to procure 12 SSBN(X)s, and is working to reduce the estimated unit procurement cost of ships 2 through 12 in the program to \$4.9 billion in FY2010 dollars. To help pay for the SSBN(X)s without reducing other shipbuilding programs, the shipbuilding funding profile in the Navy's FY2011 30-year shipbuilding plan included a "hump" of approximately \$2 billion per year in constant FY2010 dollars during the years (FY2019-FY2033) when the 12 SSBN(X)s are to be procured. The Navy's report on the FY2011 30-year plan, however, contained little explanation of how this \$2-billion-per-year hump in shipbuilding funding would be realized, particularly if the Navy's budget experiences little or no real growth in coming years. If the \$2-billion-per-year hump were not realized, the total number of ships of various kinds procured in FY2019-FY2033 could be less than the figures shown in the FY2011 30-year plan.

As mentioned earlier, if a 30-year shipbuilding plan is potentially unaffordable, this may suggest a need for a change in defense strategy, the level of DOD resources, the allocation of DOD resources, and/or the mix of ships to be procured.

Options for Altering Content of Report on 30-Year Shipbuilding Plan

Options for altering the content of the report on the 30-year shipbuilding plan include but are not limited to the following:

- Make the report's presentations of force-level goals, procurement rates, and projected force levels more detailed by breaking down the categories of amphibious ships, combat logistics force (CLF) ships, and support ships into separate ship types.
- In addition to information that currently appears in the report on the 30-year shipbuilding plan, have the report also include class-specific figures for procurement quantities, deliveries, retirements, and force levels for the budget year and the next nine years.⁷
- Formalize the practice of having the Navy provide to CRS, CBO, and the defense oversight committees, at the same time that it submits its report on the 30-year shipbuilding plan, the supplementary tables and cost data for that plan that the Navy in recent years has informally provided to CRS and CBO.

Mr. Chairman, distinguished members of the subcommittee, this concludes my testimony. Thank you again for the opportunity to appear before you to discuss these issues. I will be pleased to respond to any questions you might have.

⁷ This option would implement a direction regarding the 30-year shipbuilding plan contained in the joint explanatory statement on H.R. 6523, which was enacted as the FY2011 Ike Skelton National Defense Authorization Act (P.L. 111-383 of January 7, 2011). (See footnote 8.)

Appendix: Brief History of Requirement to Submit 30-Year Shipbuilding Plans

The first 30-year shipbuilding plan was submitted in 2000, when Congress considered DOD's proposed FY2001 DOD budget. The plan was submitted under a one-time-only legislative provision, Section 1013 of the FY2000 National Defense Authorization Act (S. 1059/P.L. 106-65 of October 5, 1999).

No provision required DOD to submit a 30-year shipbuilding plan in 2001 or 2002, when Congress considered DOD's proposed FY2002 and FY2003 DOD budgets.

Section 1022 of the FY2003 Bob Stump National Defense Authorization Act (H.R. 4546/P.L. 107-314 of December 2, 2002) created a requirement to submit a 30-year shipbuilding plan each year, in conjunction with each year's defense budget. This provision was codified at 10 U.S.C. 231. The first 30-year plan submitted under this provision was the one submitted in 2003, in conjunction with the proposed FY2004 DOD budget.

For the next several years, 30-year shipbuilding plans were submitted each year, in conjunction with each year's proposed DOD budget. An exception occurred in 2009, the first year of the Obama Administration, when DOD submitted a proposed budget for FY2010 with no accompanying FYDP. The Navy that year sent a letter to the chairmen of defense committees stating DOD's rationale for not submitting a 30-year shipbuilding plan that year.⁸

Section 1023 of the FY2011 Ike Skelton National Defense Authorization Act (H.R. 6523/P.L. 111-383 of January 7, 2011) amended 10 U.S.C. 231 to require DOD to submit a 30-year shipbuilding plan once every four years, in the same year that DOD submits a Quadrennial Defense Review (QDR).⁹ Consistent with Section 1023, DOD did not submit a new 30-year shipbuilding plan at the time that it submitted the proposed FY2012 DOD budget.¹⁰ At the request of the House Armed Services Committee, the Navy submitted the FY2012 30-year (FY2012-FY2041) shipbuilding plan in late-May 2011.¹¹

⁸ Letter dated May 12, 2009, from BJ Penn, Acting Secretary of the Navy, to Representative Ike Skelton, and similar letters to Senator Carl Levin, Representative John P. Murtha, and Senator Daniel K. Inouye.

⁹ Regarding the three years between each QDR, the joint explanatory statement of the House and Senate Armed Services Committees on H.R. 6523 stated:

The committees expect that, following the submission of the President's budget materials for a fiscal year, the Secretary of the Navy, at the written request of one of the congressional defense committees, will promptly deliver the Navy's long-term shipbuilding plan used to develop the President's budget request for that fiscal year, as well as a certification from the Secretary of the Navy that both the President's budget request for that fiscal year and the budget for the future-years defense program is sufficient to fund the construction schedule provided in that plan. The committees expect that such a plan would include the quantity of each class of ship to be constructed in that fiscal year and the nine following fiscal years.

¹⁰ Reflecting the Navy's interpretation of the language in the joint explanatory statement cited in the previous footnote, the Navy in April 2011 provided CRS and CBO with a 10-year shipbuilding plan for FY2012-FY2021.

¹¹ The Navy's cover letter for the plan is dated May 23, 2011. CRS received the plan from the Navy on May 24, 2011. The Navy's cover letter states that the plan was submitted in response to a letter dated February 15, 2011, from Representative Todd Akin, the chairman of the Seapower and Projection Forces subcommittee of the House Armed Services Committee, requesting a 30-year plan.